

INK JET PRINTING METHOD

CROSS REFERENCE TO RELATED APPLICATION

PRJ 2/2/04
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Reference is made to commonly assigned, co-pending U.S. Patent
5 Application Serial Number: ^{10/011,681} ~~1111111~~ by Missell et al., filed of even date
herewith (Docket 82949), entitled "Ink Jet Recording Element", now U.S.P.N. 6,677,004

FIELD OF THE INVENTION

This invention relates to an ink jet printing method using a porous
10 ink jet recording element containing porous polymeric particles.

BACKGROUND OF THE INVENTION

In a typical ink jet recording or printing system, ink droplets are
ejected from a nozzle at high speed towards a recording element or medium to
15 produce an image on the medium. The ink droplets, or recording liquid, generally
comprise a recording agent, such as a dye or pigment, and a large amount of
solvent. The solvent, or carrier liquid, typically is made up of water, an organic
material such as a monohydric alcohol, a polyhydric alcohol or mixtures thereof.

An ink jet recording element typically comprises a support having
20 on at least one surface thereof an ink-receiving or image-forming layer, and
includes those intended for reflection viewing, which have an opaque support, and
those intended for viewing by transmitted light, which have a transparent support.

While a wide variety of different types of image-recording
elements for use with ink jet devices have been proposed heretofore, there are
25 many unsolved problems in the art and many deficiencies in the known products
which have limited their commercial usefulness.

It is well known that in order to achieve and maintain
photographic-quality images on such an image-recording element, an ink jet
recording element must:

30 • Be readily wetted so there is no puddling, i.e., coalescence of adjacent ink
dots, which leads to non-uniform density
• Exhibit no image bleeding